

B5817WS THRU B5819WS

CURRENT 1.0 A
VOLTAGE 20 to 40 V

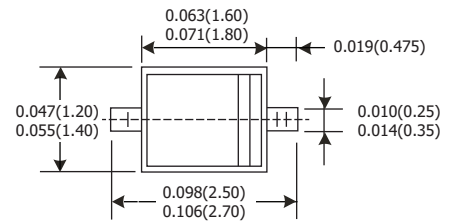
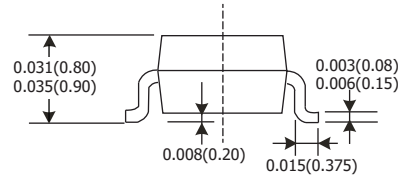
Features

- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications.

Mechanical Data

- Case : SOD-323
- Marking :
B5817WS : SJ
B5818WS : SK
B5819WS : SL

SOD-323



Dimensions in inches and (millimeters)

Maximum Ratings And Thermal Characteristics (Ta = 25°C)

Items	Symbols	B5817WS	B5818WS	B5819WS	Units
Non-Repetitive Peak reverse voltage	V _{RM}	20	30	40	V
Peak repetitive Peak reverse voltage	V _R RM	20	30	40	
Working Peak Reverse Voltage	V _R WM				
DC Blocking Voltage	V _R				
RMS Reverse Voltage	V _R (RMS)	14	21	28	V
Average Rectified Output Current	I _O	1.0			A
Peak forward surge current @τ=8.3ms	I _{FSM}	25			A
Repetitive Peak Forward Current	I _{FRM}	625			mA
Power Dissipation	P _D	250			mW
Thermal Resistance Junction to Ambient	R _{θJA}	500			K/W
Storage temperature	T _{STG}	-65 to + 150			°C

Electrical Characteristics (Ta = 25°C)

Items	Symbols	Testconditions	Min	Typ	Max	Units
Reverse breakdown voltage	B5817WS B5818WS B5819WS V _(BR)	I _R =1mA	20 30 40			V
Reverse voltage leakage current	B5817WS B5818WS B5819WS I _R	V _R =20V V _R =30V V _R =40V			1	mA
Forward voltage	B5817WS	I _F =1A I _F =3A			0.45 0.75	V
	B5818WS	I _F =1A I _F =3A			0.55 0.875	V
	B5819WS	I _F =1A I _F =3A			0.6 0.9	V
Diode capacitance	C _D	V _R =4V , f=1MHz			120	pF

RATINGS AND CHARACTERISTIC CURVES B5817WS THRU B5819WS

FIG.1-FORWARD CURRENT DERATING CURVE

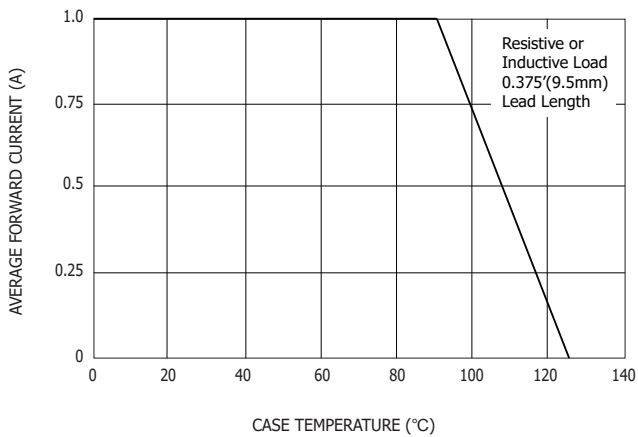


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

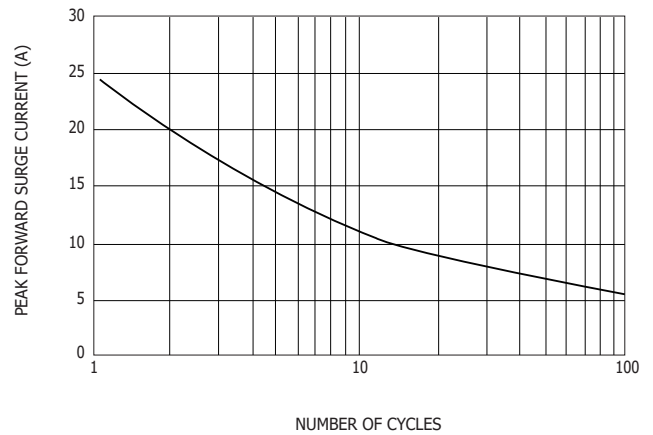


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

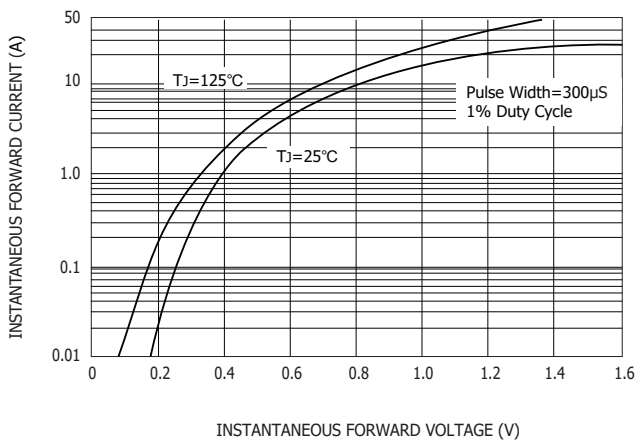


FIG.4-TYPICAL REVERSE CHARACTERISTICS

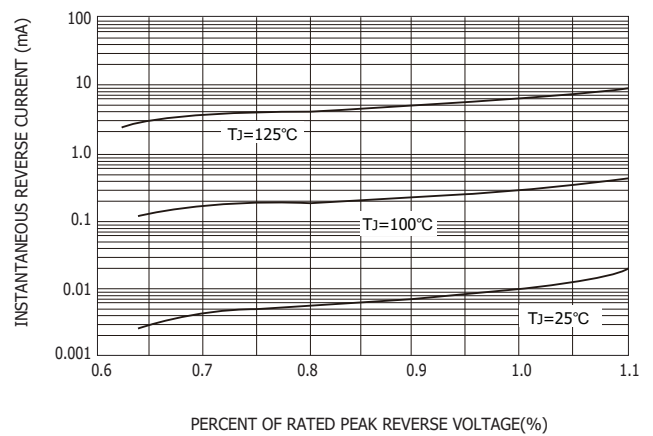


FIG.5-TYPICAL JUNCTION CAPACITANCE

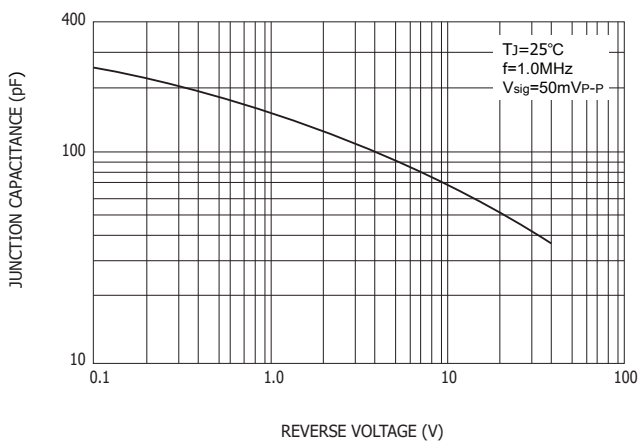


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

